

**REMARKS**

Claims 1, 3-22, 30 and 32-41 are pending in this application. By this Amendment, claims 1, 3 and 30 are amended and claims 2 and 31 are cancelled without prejudice or disclaimer.

Entry of this Amendment is proper under 37 C.F.R. §1.116 because the amendments: a) place the application in condition for allowance for the reasons set forth below; b) do not raise any new reasons that require further search and/or consideration; and c) place the application in better form for an appeal should an appeal be necessary. More specifically, the above amendments incorporate subject matter of claims 2 and 31 into independent claims 1 and 30, respectively. No new issues are raised. Entry is therefore proper under 37 C.F.R. §1.116.

Applicant gratefully acknowledges the Office Action's indication that claims 3-6, 8-17 and 20-21 contain allowable subject matter.

The Office Action rejects claims 1, 30, 32-35 and 37-39 under 35 U.S.C. §103(a) by U.S. Patent 5,541,852 to Eyuboglu et al. (hereafter Eyuboglu) in view of U.S. Patent 6,310,915 to Wells et al. (hereafter Wells) and U.S. Patent 6,621,866 to Florencio et al. (hereafter Florencio). The Office Action also rejects claims 2 and 31 under 35 U.S.C. §103(a) over Eyuboglu, Wells, Florencio and further in view of U.S. Patent 5,253,041 to Wine et al. (hereafter Wine). The Office Action also rejects claims 7 and 36 under 35 U.S.C. §103(a) over Eyuboglu, Wells, Florencio and further in view of U.S. Patent 6,058,143 to Golin. Additionally, the Office Action rejects claims 18-19, 22 and 40-41 under 35 U.S.C. §103(a) over Eyuboglu, Wells, Florencio and further in view of Applicant's alleged admitted prior art (hereafter AAPA). The rejections are respectfully traversed.

Independent claim 1 recites a video pre-processing unit having a predetermined matrix structure and down-sampling a macro block decoded by the video decoder by transforming the macro block into a corresponding picture structure. Independent claim 1 further recites that the video pre-processing unit carries out down-sampling through a field based processing if the data decoded in the video decoder is a frame picture in an interlacing sequence and the video pre-processing unit carries out a down-sampling through a frame based processing if the data decoded in the video decoder is a field picture structure having a sequential scanning sequence or an interlacing sequence. Independent claim 1 further recites a frame memory storing the down-sampled macro block and a transcoding parameter control unit detecting information about a picture from a previous bit stream variable-length-decoded by the video decoder and setting up an encoding mode for a transcoding in accordance with the detected information.

The applied references do not teach or suggest all the features of independent claim 1. More specifically, the Office Action indicates that Eyuboglu does not disclose the claimed video pre-processing unit or the claimed bit rate control unit. The Office Action then cites Wells as teaching a video pre-processing unit. See Wells' Figure 2, element 20. However, Wells merely discloses that an encoder 20 may decimate or subsample the decoded pictures in a horizontal direction prior to re-encoding. See Wells' column 11, lines 39-48. This does not suggest all the features of independent claim 1.

More specifically, independent claim 1 recites that the video pre-processing unit carries out down-sampling through a field based processing if the data decoded in the video decoder is a frame picture in an interlacing sequence and that the video pre-processing unit carries out a

down-sampling through a frame based processing if the data decoded in the video decoder is a field picture structure having a sequential scanning sequence or an interlacing sequence. Similar features were recited in dependent claim 2. In rejecting previous claim 2, the Office Action cites Wine's Figure 7 and elements 41-4. Wine does not relate to determination of field based processing or frame based processing. As such, the combination does not suggest all the claimed features. The Office Action asserts that it would have been obvious that Wells preprocessing unit would carry out down sampling through a field based processing if the data decoded in the video decoder is a frame picture in an interlacing sequence or carry out down sampling through a frame based processing if the data decoded in the video decoder is a field picture having a sequential scanning sequence in order to conform with the encoding standard. See the paragraphs bridging pages 7-8 of the Office Action. However, Wine does not teach or suggest these claimed features that are alleged to be within the combination. That is, Wine does not teach or suggest carrying out the desampling through either a field based processing or a frame based processing if the data decoded in the video decoder is a frame picture in an interlacing sequence or is a field picture structure having a sequential scanning sequence or an interlacing sequence.

The Office Action's citation to Wine's alleged field based processing does not teach or suggest all of the features independent claim 1 relating to both field based processing and frame based processing. Accordingly, the applied references taken as a whole do not teach or suggest all of the features relating to the video preprocessing unit recited in independent claim 1. Furthermore, there is no suggestion of how Wine's structure may be combined with Eyuboglu,

Wells and Florencio so as to reach all of features of independent claim 1. Thus, independent claim 1 defines patentable subject matter at least for this reason.

Independent claim 30 defines patentable subject matter for at least similar reasons. That is, independent claim 30 recites a video pre-processing unit to down-sample a macro block decoded by the video decoder, wherein the video pre-processing unit carries out down-sampling through a field based processing if the data decoded in the video decoder is a frame picture in an interlacing sequence or the video pre-processing unit carries out a down-sampling through a frame based processing if the data decoded in the video decoder is a field picture structure having a sequential scanning sequence or an interlacing sequence; a frame memory to store the down-sampled macro block; a transcoding parameter control unit to detect information about a picture from a previous bit stream variable-length-decoded by the video decoder and to determine an encoding mode based on the detected information. For at least the reasons set forth above, the applied references (including Wines') do not teach or suggest all of the features of independent claim 30. Thus, independent claim 30 defines patentable subject matter.

Each of the dependent claims depends from one of the independent claims and therefore defines patentable subject matter at least for this reason. In addition, the dependent claims recite features that further and independently distinguish over the applied references.

### **CONCLUSION**

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1, 3-22, 30 and 32-41 are earnestly solicited. If the Examiner believes that any additional changes would place the


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application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **David C. Oren**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,  
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